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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,168

11/20/2006

Nico Erasmus

183-14

9991

24336 7590 03/11/2010  
TUTUNJIAN + BITETTO, P.C.  
20 CROSSWAYS PARK NORTH  
SUITE 210  
WOODBURY, NY 11797

EXAMINER

SINGH, SUNIL

ART UNIT

PAPER NUMBER

3672

MAIL DATE

DELIVERY MODE

03/11/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,168	<b>Applicant(s)</b> ERASMUS ET AL.	
	<b>Examiner</b> Sunil Singh	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,4,5,8,11,13,14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4,5,8,11,13,14,16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claims 16,2,4,5,8,11,13,14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 16 calls for the second end to be engaged with the other of the hanging wall and the foot wall, "optionally by means of a pre-stressing device". However, the disclosure never enabled one to have the second end engage the other of the hanging wall and the foot wall without a pre-stressing device. Therefore, the pre-stressing device is not optional.
2. Claims 16,2,4,5,8,11,13,14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed disclosure has no basis for the second end to be engaged with the other of the hanging wall and the foot wall, "**optionally by means of a pre-stressing device**". The disclosure never provided basis for one to have the second end engage the other of the hanging wall and the foot wall without a pre-stressing device. Therefore, the pre-stressing device is not optional as such limitation constitutes new matter.

Art Unit: 3672

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16,2,4,5,8,11,13,14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 is confusing because claim 16 calls for the second end to be engaged with the other of the hanging wall and the foot wall, "optionally by means of a pre-stressing device". However, the disclosure does not particularly point out how one can have the second end engage the other of the hanging wall and the foot wall without a pre-stressing device. Therefore, the pre-stressing device is not optional.

Claim 16 line 4, "a opposed end"; should be --an opposed end--.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2,4,5,8,11,13,14,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document (DE 2410976) in view of Hall (US 6558085).

Art Unit: 3672

German document discloses a mine support for use in an underground excavation with a hanging wall (12,14) and an opposed foot wall (12,14), the mine support comprising: a single deformable tubular sleeve with a circular cross section (18, see page 3, see marked up drawing below) made from a ductile metal, which has a first end and an opposed second end, the sleeve, in use, being positioned in the excavation with the first end directly engaged with one of the hanging wall and the foot wall and the second end engaged with the other of the hanging wall and the foot wall, optionally by means of a pre-stressing device(16,20,28,30, see marked up drawing below), a first material (26,31,see marked up drawing below) with a first strength characteristic inside a first interior portion of the sleeve and filling said first interior portion of the sleeve; and a second material (26,31, see marked up drawing below) with a second strength characteristic inside a remainder of the sleeve interior and filling said remainder of the sleeve interior; the first interior portion having a length, in an axial direction of the sleeve, which is greater than the length of the remainder of the sleeve interior in the axial direction of the sleeve and wherein, in use, one material only overlies the other material. German document discloses the invention substantially as claimed. However, German document is silent about the first and second material being differing cementitious material. Hall teaches first and second material being differing cementitious material (see abstract, col. 3 lines 10-20, col. 4 lines 1-20, see Figure 3). It would have been considered obvious to one of ordinary skill in the art to modify German document by substituting the first and second cementitious material as taught

Art Unit: 3672

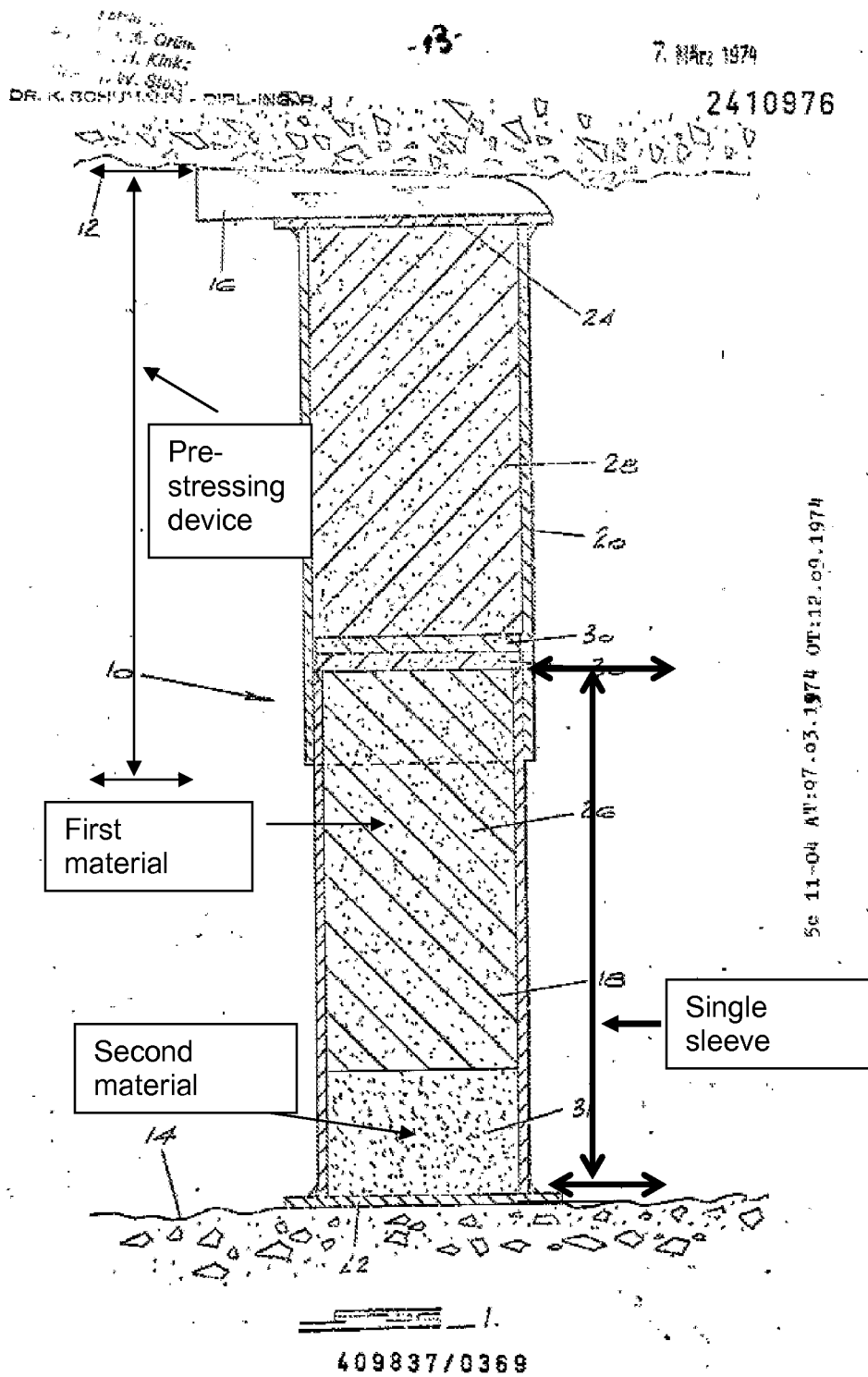
by Hall for the first and second material disclosed by German document since such a modification would yield predictable deformation.

With regards to claims 4,5, it would have been considered obvious to one of ordinary skill in the art to modify German document to have the length limitations as called for in claims 4,5 since such a modification yield predictable deformation.

With regards to claims 8,11 it would have been considered obvious to one of ordinary skill in the art to modify German document to have the density limitations as called for in claims 8,11 since such a modification yield predictable deformation.

With regards to claims 13,14, it would have been considered obvious to one of ordinary skill in the art to modify German document to have limitations as called for in claims 13,14, since such a modification yield predictable deformation.

Art Unit: 3672



***Response to Arguments***

7. Applicant's arguments filed 3/3/2010 have been fully considered but they are not persuasive. Applicant argues that German document fails to teach a single sleeve. The examiner disagrees. German document teaches a single sleeve (18, see drawing above). Applicant argues that German document fails to teach a single deformable tubular sleeve with a circular cross section made from a ductile metal. The examiner disagrees. German document teaches a single deformable tubular sleeve with a circular cross section made from a ductile metal (18, see page 3, see drawing above).

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/  
Primary Examiner, Art Unit 3672

Sunil Singh  
Primary Examiner  
Art Unit 3672

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